

## Four Points in a Row

You will need:

- One-inch grid paper
- Marker
- Pencil
- Partner
- Large piece of construction paper

1. Teach the students how to play Four Points in a Row (directions for playing the game are found in the additional handout labeled "Tic-Tac-Toe.")
2. Ask students to record on one-inch grid paper the winning four points for their game. The four ordered pairs should be recorded using a dark marker on a large piece of paper and written in large numbers.
3. Students then post their grid on the wall and hand you the large piece of paper where they have recorded the four ordered pairs that represent the winning points on their coordinate grid.
4. Once the grids are posted, have students discuss how they might sort the grids, then ask for two volunteers to actually sort the grids on the wall.
5. In small groups, have students describe how the grids have been sorted. Ask students how they know that a particular grid belongs in a particular group.
6. After some discussion, show one set of ordered pairs that a group has recorded on a large piece of paper and present the task: "By looking at these ordered pairs, describe in which group its graph might be found and explain your reasoning."
7. Following that discussion, distribute a set of ordered pairs that students handed in, one per pair. Ask students to determine which grid represents that set of winning ordered pairs and to post the ordered pairs next to the grid.
8. Summarize the lesson by asking students to discuss or write about what they think they understand about graphs and ordered pairs of numbers as a result of this experience.